EXECUTIVE OVERVIEW

Recommendation

We recommend the purchase and implementation of a financial package suite to replace the Company's core financial systems. This project is estimated to cost approximately $2.5 million and generate annual savings of $800,000 and one time cost avoidance of $370,000. Importantly, this project will replace our aging (over 20 years old) and low functional financial applications with widely used competitive tools that will provide the foundation for the Company's overall financial management. The business case presented in this document will demonstrate the multitude of needs and expectations for this project. This project is clearly long overdue and will have to be done now or later to meet our growing business needs. Delaying this project will cause us to spend significant money to make our current 20 year old systems year-2000 compliant, which is economically more costly than proceeding now with replacement. Keeping o w current systems for the long haul is NOT a viable option due to their low functionality and inflexibility.

Business Case

In preparing this document, four NI-Gas employees and consultants from the Revere Group interviewed a cross-section of officers, managers, supervisors and staff. The *interviewing process* included approximately 70 people to validate our assumptions and expectations for this project. From a client perspective, the key issues center around timeliness and accessibility of data The data gathered at this stage would indicate that over $1 million in effort is expended annually on a few key activities centered around "chasing the numbers". This business case projects that half . of this effort will be eliminated, generating hard FTE reductions and freeing up time which will be reallocated to other business activities. (Specifically, 5 *FTE reductions saving $486,000 and indirect FTE's totaling $316,000).* Although we have not attempted to quantify any intangible benefit savings, people will be able to make better decisions as a result of more timely and easy access to true cost data. A 1/2% reduction in operating expenditures is worth $750,000.

Throughout the business case development, virtually everyone we interviewed emphatically expressed that the current financial systems were not capable of meeting our current or future needs and *keeping these systems is not a viable option.* We don't provide the data needed! During the interview process, the consultants from Revere Group were continually amazed that we could be an industry leader given the state of our current processes and systems. In trying to answer their question of "How can this be?", the only response that makes sense is "It's the people we employ". We've been able to keep our systems going and run our business because of the quality of people we hire and their dedication and willingness to succeed. *Imagine what* they *could accomplish if we give them the right tools!*

As the Company continues to grow and evolve, the organization's technology infrastructure must evolve with it in order to remain the industry leader. Information systems are crucial for the sharing of information, enterprise-wide, to compete effectively in this rapidly changing industry. This project will lay the *financial information* access foundation upon which the Company will meet its current and can build its future financial information needs. The overall strategy of this project is to replace the financial applications currently running at the Company with widely-used integrated financial applications.

This strategy is consistent with previous studies, the FAST, IST & SRIT Team recommendations, and Financial System Portfolio analysis conducted by IT in 1996. Coordination with the other major system replacement projects will be a key to success. The "financial systems" are also considered by most to be anything with dollars involved and timeliness continues to be a primary concern for most financial system users. As a result, the replacement scope must be carefully managed and expectations clarified throughout this project.

The Hackett Study

In 1995, Northern Illinois Gas and NICOR participated in The *Hackett* Group benchmark analysis of the Accounting and Finance functions. The benchmark suggested that our lack of investment in financial system technology likely impacts the ability of these areas to perform their duties in an effective manner.

The benchmark study compared labor, systems, and other miscellaneous costs. The systems cost for all the accounting/finance areas that were benchmarked included computer processing and maintenance. NI-Gas' system costs are 37 percent lower than what first quartile companies in the study spent on these cost and our staffing levels were significantly higher than first quartile. The Hackett Group highlighted this as an all too common correlation in the study. While significant staff reductions have occurred in recent years (over 20%), remaining staff efficiencies will be gained primarily through technology. (Source: FAST Restructuring Report, 1996)

Risk Assessment

The reliability of the Company's financial systems continues to be a great concern. The closing process for the month of May once again was delayed, making this the 23rd out of the past 28 months that the system closing process has not functioned as designed. Failure to report results in a timely manner clearly adds to internal costs and credibility and if those failures occur during a quarter close may cause external parties undesirable uncertainty about the company results. Examples of failures include: At year-end close, there were 12 people here overnight to "get the close to work"; the Treasury Management System closing was delayed several weeks in May; and we had trouble adding an additional company to the MAS90 system. While each of these individual problems can be rectified, we should not continue to run the company's financial systems with the ongoing risk of failure.

Financial **Systems** Replacement Project
Business Case

In addition, it makes little business sense to invest over $270,000 to make our 20 **year** old financial systems year-2000 compliant. Additional risks of not proceeding with this project are explained in the **Risk** Assessment section, including personnel risks and data integrity.

Scope

The *scope of the project* will include replacement of approximately **19** systems (including the **NICOR** accounting systems) and changes in the interfaces with 10 systems. (See attached flowcharts pages 6-8.) A redesign of the chart **of** accounts will take place to capture costs using standard business practices **that** allow **for** reporting organizationally and **cross-functionally,** for example. This will impact 13 systems. **Integration** of financial data is necessary to drive consistency and efficiency in the "chasing of numbers" that occurs throughout the company. Our objective will be to create a single consolidated repository of the **reportable** financial information for the 390 financial system users with direct access back to the details.

A narrower scope was considered for this project, specifically, just to replace the general ledger. However, this alternative would still leave us with islands of data, difficulty in changing the chart of accounts, not multi-company capable, and doesn't provide a central source for financial data

Timetable

The *time line* for this project includes the following:

Phase **II** - Detailed Requirements	12 weeks starting **7/15/97**
Vendor Selection	10/1/97
Software Delivery	1/1/98
Conference **room** pilot	4/1/98
Non-NI-Gas entities "Live Date"	Mid-**1998**
1999 Budget Process	Fall, 1998
NI-Gas "Live Date"	1/1/99

Financial Systems Replacement Project
Business Case

Resources

Resource requirements for this project are expected to include four full-time NI-Gas peo'ple and three consultants. Additional ancillary resources will be utilized throughout the project. The following is a *preliminary* high-level summary of the costs estimated for this project (all dollars are in thousands). These numbers will be refined as we further detail the requirements in the next phase, and consulting requirements are finalized.

Project Costs

Software		$445
Implementation Costs		
Core Team	$485 *	
Consultants	$500-750	
Conversions/Interfaces	$282	
Infrastructure Support	$ 55 *	
Total		$1,322 — 1572
Hardware		$335
Training		$148
Contingency		$250
Total		$2,500-2,750

Note: *Payroll additive of 54%, which totals $292, is added on in the economic analysis.

Economics

? The NPV is *approximately +$1,400,000,* based on the $2.5 million investment and the $.8 annual direct and indirect savings and the $.4 one-time cost avoidance. Annual savings of only $(x) are required to reach a break-even NPV. Further detail is provided in the Cost/Benefit section and in the NPV section of the appendix.

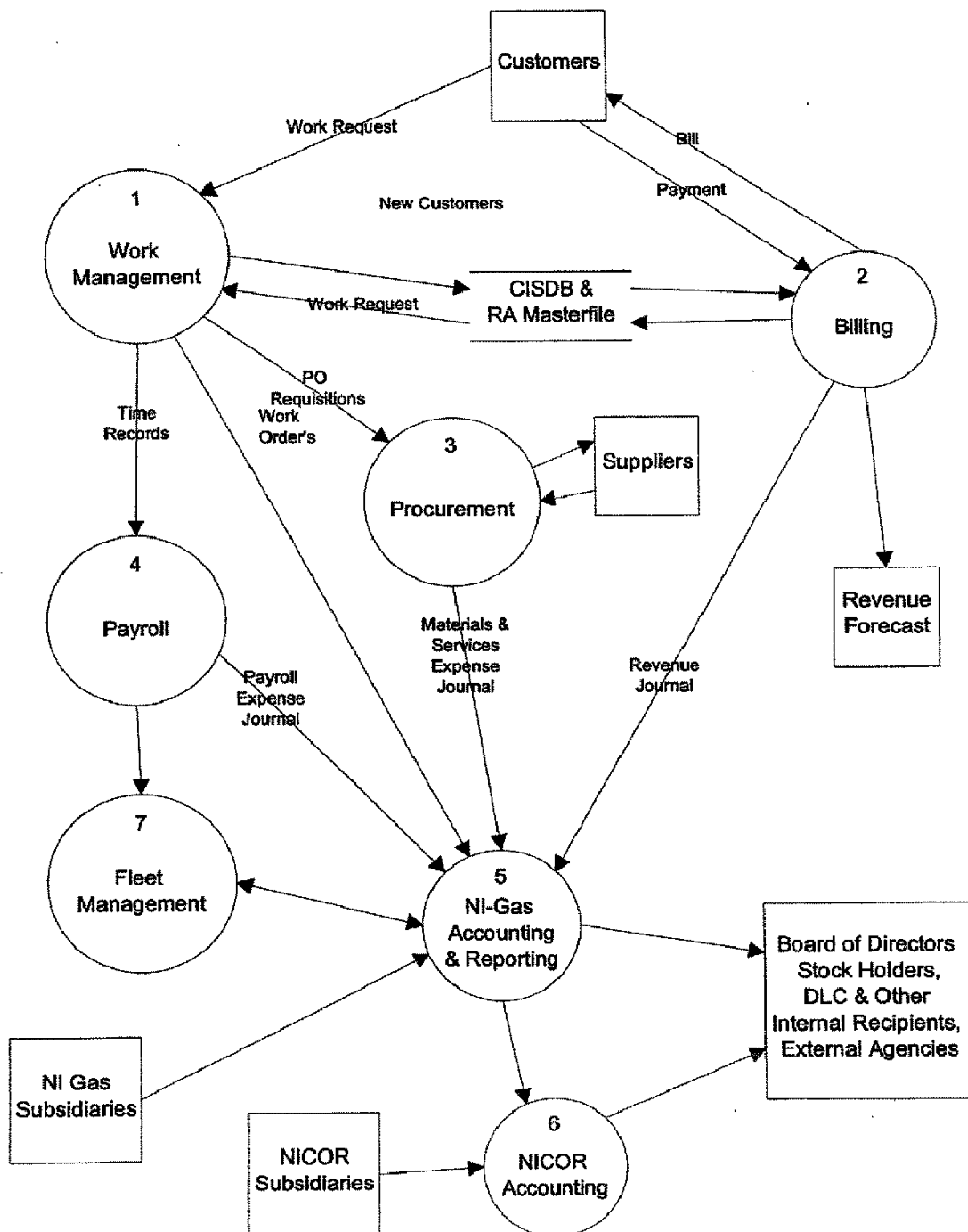Financial Systems Replacement Project
Business Case

Next Steps

The next phase of this project will focus on the requirements definition and vendor selection. We will work with the Revere Group to drive more specific details into the process and data flow models we have begun. This will lead to further assessment of the current state and drive new detailed requirements for the future state. We have purchased the Decision Drivers General Accounting/Financial Applications Model from the Gartner Group to assist in our vendor analysis. Nine financial packages will be evaluated initially by using the model and other data previously gathered by the Gartner Group. (Tropical Shipping is also using this approach.) Functional requirements will be finalized in order to narrow the vendor list to a select few. We will proceed with an RFP process, and vendor on-site demos using specifically scripted scenarios. We will then make a vendor selection and proceed through contract negotiations. After vendor selection, detailed implementation plans and resources will be finalized. We expect to complete this process by 1011197, in time for 1998 budgets.
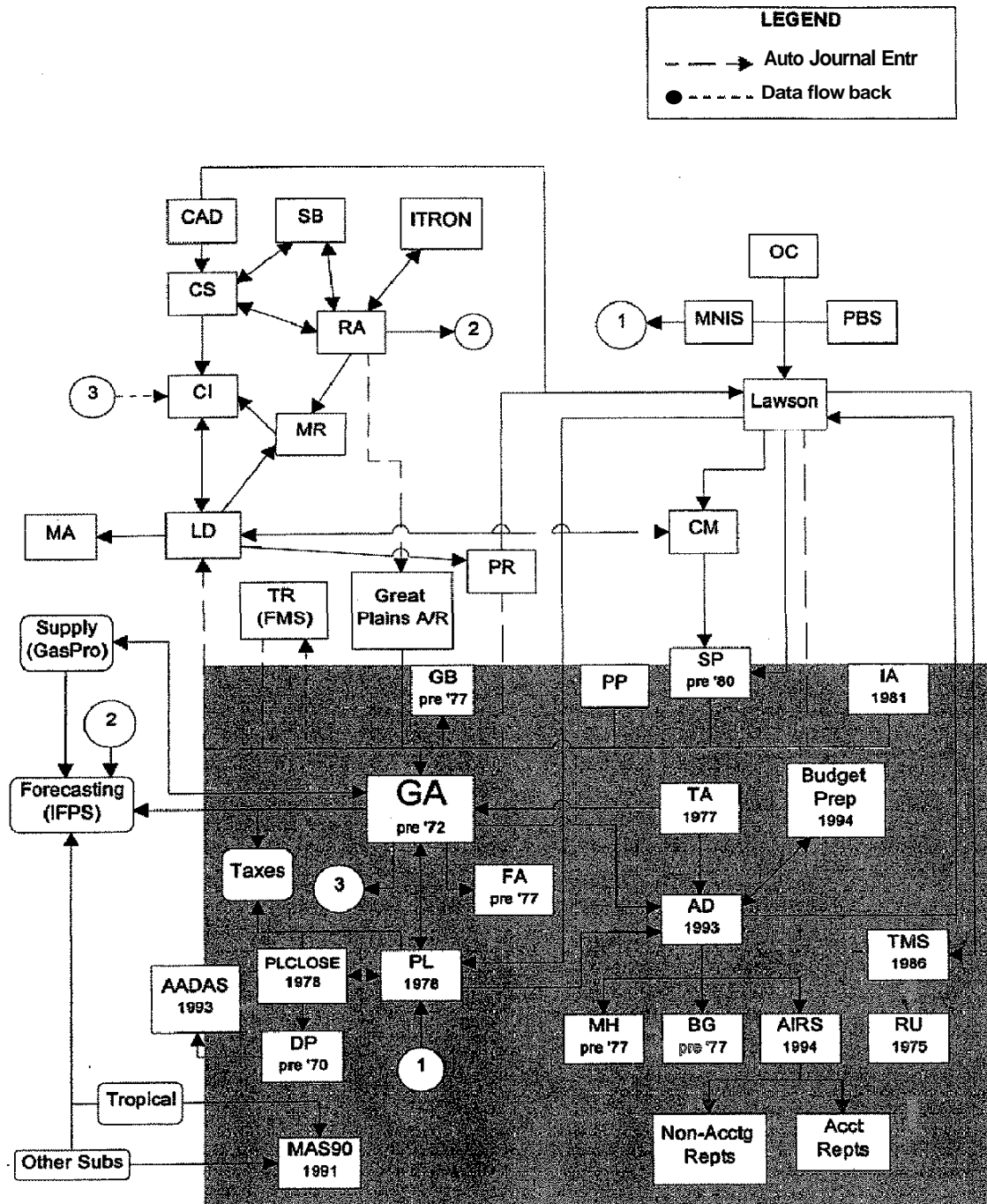
Financial Systems Replacement Project
Business Case

Dataflow Diagrams

Context Diagram

Financial **Systems** Replacement Project
Business Case

Replacement Boundaries

Financial Systems Replacement Project
Business Case

System Descriptions

Accounting

AADAS	Arthur Andersen Depreciation System	
AD	Accounting Data	
AIRS	Acctg Info Retrieval System	5-yr history, detail, function and BC summaries
BG	Budget System	
DP	Depreciation Studies	
FA	Financial Accounting Studies	
GA	General Accounting	general ledger system
GB	General Books	
IA	Intercompany Billing System	
IFPS	Forecasting financial models	
Lawson	Procurement Module	includes Accounts Payable, Inventory Control, Purchase Orders, and Requisitions
LD	Labor Distribution	system to compute cost per job
MAS90	Subsidiary Accounting System	
PL	Plant System	Construction work in process
PLCMSE	Plant system	Fied assets
RU	Reconciliation/Unclaimed	Bank reconciliations
TA	Technical Accounting	houses the chart of accounts and account balances
TMS	Treasury Management	

Other

AIR	Great Plains Accounts Receivable	Miscellaneous Billing
CAD	Computer Aided Dispatching	
CI	Customer Information	
CIS	Customer Information System	database for CS
CM	Construction Maintenance	
CS	Customer Service System	
Itron	hand held reading devices	
MA	Meter Accuracy	
MH	man hours	
MR	Meter Reading System	
OC	On-line Communication System	phone bills
PBS	Personnel Benefits System	
PP	Postage System	
PR	Payroll System	
RA	Revenue Accounting System	billing system for sales customers
SB	Special Billing	billing system for transportation customers
SP	Service Pipe System	tracks costs by service size by area
TR/FMS	Transportation System	tracks cost by vehicle

Financial Systems Replacement Project
Business Case

HIGH-LEVEL NEEDS ANALYSIS

The High-Level Needs Analysis lays the ground work for the Requirements Finalization, Software Selection, and Design and Implementation project phases.

Objectives

1. Ensure timely and accurate system functions in support of financial reporting requirements by:

   ◇ Enabling timely access to Company data allowing management to analyze arid respond to adverse business conditions before they become problems.

   ◇ Facilitating activity based analysis and cross-organizational reporting

   ◇ Supporting profitability analysis (flexible views such as customer, product, organization)

   ◇ Supporting "real cost" management

   ◇ Facilitating the business decision making process

2. Provide an integrated financial system across the entire organization that utilizes supported enterprise databases.

3. Provide a solution which easily handles and facilitates re-organizations.

4. Eliminate the redundant storage and processing of financial data and the human effort needed to maintain these systems (e.g., shadow reporting systems, Lotus spreadsheets).

5. Implement a system with proper security controls.

6. Select a software product that minimizes customization and is compatible with the Company technical architecture plans.

7. Implement the new financial system on-time and within budget.

8. Significantly reduce efforts associated with the generation of governance and compliance reporting.

9. Facilitate user understanding (Educate and Communicate). Be proactive in addressing user concerns such as:

How will a project of this nature change the Company?

How will a project of this nature change my job?

What should I expect to happen and when?

What should I be doing to get ready for these changes?

Best Practices Implementation

Based on the Objectives of this project the following industry best practices have been identified and will be applicable to the Financial Systems Replacement project:

- The General Ledger will provide a "seamless" linkage to all other applications and functions as a part of an integrated systems solution. Related detail data that exists in feeder systems can and will be accessed through the General Ledger system to support financial analysis.

- The General Ledger will maintain a level of detail necessary for corporate financial analysis and reporting. More detail will be maintained in the feeder systems.

- Location of data and information will be transparent to the user. Users will have accurate and   current business information necessary for faster analysis and better decision making.

- Books will be closed in 5 days or fewer.

- All general ledger activity will be automated and on-line with no paper processing.

- Business information will be available as needed, not just at the end of a month or quarter.

- Reports will be available on-line and be "pulled" by users, not "pushed".

- Standard/common reports will be used by business units. Information will be in a form and content which enables decision makers to efficiently and effectively perform their job function.

- Standard reports will also be available on a subscription basis (pre-determined format, data, and timing) for **users** who require **them.**

- Standard reports will be created from standardized data, consolidations and aggregations; there is one source for each standard report in the company.

- All standard reports are relevant to present business needs.

- Creators of **ad hoc** reports and analyses are responsible for content, and for articulating any differences from source-data/information/standard reports.

- All presentation follows documented standards for **format,** headings, labels, **etc.**

- Repetitive analyses will be **converted** to standard reports.

- There will be no re-keying of data from system generated **reports** to final reports and no manual **adjusting** entries to reports.

- Data will be entered only once, as close to the source as possible, moved only when necessary, and validated at the source per **formal** standards and procedures.

- Data and **information** will be available with approved security to any authorized user who needs it, at any **required level,** to do **his/her** job.

- Book and **Tax** accounting can be maintained simultaneously.

- The General Ledger system will be flexible enough to absorb new entities and future business demands without major overhaul.

- Packaged **software** will be purchased, **installed** and periodically updated by the vendor.

- Existing methodologies, **procedures,** and periodic **studies** will be reviewed for business fit on a cost justified basis.

Process Improvement

The following processes will be further redesigned as part of the scope of this project. These processes can bring about additional efficiencies to the organization. Most of these items were captured during the interview process.

- Reorganize the accounting department's area of responsibilities so that a single department performs all of the activities for like functions, including actuals, budgets, forecast, etc.

    - ◆ O&M Analysis (operating and Maintenance Expense)
    - ◆ Cash Flow Analysis
    - ◆ Provisions for Uncollectible Analysis
    - ◆ Tax Accruals
    - ◆ Cost of Gas
    - ◆ Interest Analysis
    - ◆ Margin Analysis
    - ◆ etc.

- Design a standard chart of accounts to meet all reporting (management and compliance) and balancing requirements.

- Budget variance analysis process will be substantially improved by the replacement financial system and chart of accounts redesign. Users will be provided standard and ad hot reports that show various views for variance analysis.

- Improved governance and compliance reporting. Financial data will be kept at the level of detail needed and will be easier to access, thereby shortening the analysis time needed to prepare reports.

- Automate the Arthur Andersen PBC work papers.

- Implement and formalized project management and accounting.

- Simplify and automate the intercompany billing process.

- Combine NI-Gas and NICOR processes where appropriate.

- Drive consistency in capturing and reporting of revenue components.

- Replace the "Speed Report" with system generated standard reporting.

- **Process feeder systems journal entries daily or as available.**

- **Automate the account reconciliation processes.**

- **Simplify and automate, where possible, periodic studies**

  A&G
  Burden
  Building & Grounds
  Three-factor Formula
  Payroll Additive
  etc.

PROJECT SCOPE

The scope of this project includes **several** system replacements. Our financial systems **are** quite old, usually older than 1980. **As** part of this project, however, there are several business process opportunities which can and should be addressed. In addition, the role of the accounting and IT professionals will be altered as a result of this project. Managing the overall scope of this project will be **critical** to the overall success.

This project will **include:**

4   Re-engineer chart of accounts, the financial data and reporting to meet current and future business needs.

4   Replace all financial systems and revamp methodologies (practices) to meet the new requirements.

4   Provide an integrated information system that gathers, analyzes and provides critical information to all corporate users concerning measurements of financial **performance.**

Current State of Affairs

To understand the scope and complexity of this project, the **following** statistics are presented regarding the current state of our financial applications and processes:

Number of current users of **Financials**	
-Accounting Departments	79
-Non-Accounting Departments	308
Number of Systems in Scope (Average age approximately 20 **years)**	19
Number of Functions	7,000
Number of Work orders	12,000
Annual Number of Detail Transactions	2,500,000
Number of Departments	400
Number of Budget Items (Budget Codes)	2,878
Number of Accounts (**Entry** Codes)	6
Number **of Accounting Reports**	120

We examined briefly an alternative which would include upgrading our existing systems to be year 2000 compliant and adding some identifiable technology and functional capabilities. These costs are extraordinarily high in light of the current state of affairs. These costs are documented in the appendix, and did not warrant further review or economic analysis. Replacing the financial systems seems to be the only sensible alternative.

Automation Boundaries

Much of today's financial reporting is based on the "Detail Function Ledger" transaction data and subsequent roll-ups. This data is researched and manipulated into several different spreadsheet-based reporting systems. Detailed data that is not contained in the ledger is also added to many of these spreadsheet based reporting systems. Much of this work consists of manual rekeying or tailor-made downloads of data and is often duplicated within the different Accounting and Budget areas. With the replacement financial system and the chart of accounts redesign, the majority of this manual effort will be eliminated. The new financial system will contain a level of detail to support all of the corporate reporting requirements. The financial data will be presented in the form of Standard *Reports,* System *Inquires, Ad hoc Reports, and* simple *System Drill Arounds. As* a *result* of the requirements phase of this project, several Business Processes will be redesigned. These are discussed in more detail in the "Process Improvement" section. These improvements cover how the accounting department functions, automating as much of the reporting as possible. The **accounting** department should become a **service** oriented organization to the non-accounting and accounting users of the financial systems.

With The Company's direction on other significant system replacement projects (HR/Payroll, CIS/Billing, etc.) in mind, the scope of this project will be to:

- Minimize the changes to the current feeder systems that are expected to be replaced in the future.

- Redesign the chart of accounts to meet current and future business needs without limiting ourselves to the detail that can currently be provided by the current feeder systems.

- Provide detailed interface requirements to all the replacement project teams to insure that in the future the **required** detail will be captured. In the interim, there will be an effort to minimize the changes to the current systems designs.

Applications

The following applications will be replaced in this project:

- ⇒ **AD**   - Accounting Database
- ⇒ **AIRS**   - Accounting Information Retrieval System
- ⇒ BG   - Budgeting System
- ⇒ BP   - Budget Prep
- ⇒ DP   - Depreciation Study
- ⇒ **FA**   - Financial Accounting
- ⇒ **GA**   - General Accounting
- ⇒ **GB**   - General Books
- ⇒ IA   - Inter-company Billing
- ⇒ MAS40   - NICOR Accounting System
- ⇒ MH   - Man Hours
- ⇒ PL   - Plant, construction work in progress
- ⇒ PL close   - Fixed Assets
- ⇒ PP   - Pre-paid Postage
- ⇒ RU   - Reconciliation and Unclaimed
- ⇒ SP   - Service Pipe (partial)
- ⇒ **TA**   - Technical Accounting
- ⇒ Taxes   - Tax Department Reporting
- ⇒ TMS   - Treasury Management System.

       *   TMS/GB/RU replacement study is already underway. The FIS Project Team will insure adequate analysis and coordination takes place.

System Interfaces (Journals Entries In)

- ⇒ PR   - Payroll
- ⇒ LD   - Labor Distributions
- ⇒ Lawson   - Lawson Procurement
- ⇒ RA   - Revenue Accounting
- ⇒ SP   - Service Pipe

⟹ A/R   - Miscellaneous Billing (Great Plains)
⟹ TR/FMS - Transportation

System *Interfaces (Transaction data oat)*

⟹ LD   - Labor Distribution
⟿ IFPS   - Forecast Models
⟹ AADAS   - Depreciation Analysis **System**
⟹ TR/FMS   - Transportation
⟹ MNIS   - Operating Feeder Systems

Conversions

Conversion of existing data into the new system will be necessary and require significant efforts. Only the necessary data will be converted. The following list of conversions will be completed during this project:

⟹ General Ledger Master File   Load 1/1/99 balances to new account structure

⟹ MAS90 General Ledger and Accounts Payable
        A/P conversion could happen in 1997.
        G/L in mid-1998 by converting 1998 data.

⟹ Transaction History   Remap and roll-up to new account structure into level of detail to be maintained in the financial system. Some allocations will need to take place.

⟹ **Budget**   1999 budgets will be prepared using the new account structure. Historical data will be converted to the new structure as available.

⟹ Fixed Asset/Retirement Master   Load data to new account structure to accommodate book and tax fixed asset accounting.

Success Factors

In order for this project to be completed successfully within scope, the following critical *success factors* must be adhered to:

- Empowering individuals to resolve project issues in order to facilitate a *timely* decision making process. We will propose a team structure to facilitate this.

- Commitment and involvement during the project from the Company's *executive management* and *key department personnel*

- An effective project management and organization structure which facilitates timely *communication* and issue resolution

- Dedicated resources must be made available to this project. Consultants will be utilized for technical and application knowledge, assist in project management and will fill in resource gaps as needed.

- User acceptance, participation, and *ownership*

- A commitment to changing the way we account for things where it makes sense.

- Quality Assurance checkpoints to *minimize risk,* enhance project deliverables, and confirm project work plans

- Continuous *transfer of knowledge* to the Company's professionals to ensure self- sufficiency and internalization of formal project management methodology and techniques upon project completion

Measures of Success (Preliminary)

In order to measure the success of the project, we have established the following goals:

- Financial System User Satisfaction - need to establish benchmark

- Books closed in 5 days or less.

- 75% of financial reporting will be provided through standard reports

- Hackett Group benchmark - achieve 1st quartile within four years. This will require continued participation in the Hackett study.

Time Frames

The chart on the next page portrays our project timeline and milestones.

ID	Task Name
1	Phase 1 - Project Kickoff
2	Feasibility Test
3	Phase 2 - Project Definition
4	Business Needs
5	Functionality Rqmts
6	Prep NI-Gas Business Plan
7	Product Selection
8	Prioritize Features / RFP
9	Evaluate Packages / Demo
10	Select Package
11	Negotiate Contract
12	Go / No Go
13	Phase 3 - Implementation
14	Detail Design
15	Prototype/Conf Room Pilot
16	Non-NI-Gas Entities
17	Developement
18	File Conversions/Interfaces
19	Testing
20	Training
21	1999 Budget Process
22	Implement Package
23	Post Implementation

Milestones noted on chart: 12/5 (task 12 Go/No Go), 1/1 (task 22 Implement Package)

Legend:

Task	▬▬▬	Summary	◣▬▬◢	Rolled Up Progress	▬▬▬
Progress	▬▬▬	Rolled Up Task	▬▬▬		
Milestone	◆	Rolled Up Milestone	◇		

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COST BENEFIT ANALYSIS

We have evaluated expected investments and savings for **this** project. While many of the benefits can be quantified, significant improvements in technologies, tools, and general data access are difficult to quantify. The economics as shown provide a basis for proceeding with this project. The intangible benefits to be gained should further guide us to make this investment.

The data below is further detailed in the Appendix. The benefits derived relate to the objectives, **are** within the boundaries of the processes and are **directly** a result of this project.

Costs

Software:

General Ledger	160,000
Asset Management	75,000
Activity Management	160,000
Informix Software (ESQLC)	50,000
Total Software	445,000

Development and Implementation:
Company Core Project Team:

Detail Design	92,000
Package Software Implementation	393,000
Total	485,000

Consultant Services:

Detail Design	150,000
Package Software Implementation	350,000
Total	500,000

Programming Services:

Data Conversion	156,000
Feeder System Changes For Chart Of Accounts Revisions	125,000
Total	281,000

Company Infrastructure Support:
    Labor For Data Communication, DB Support, Etc.   55,000

Total Development and Implementation (Note 1)   1,321,000

Hardware: (Note 4)
    Unix Server   335,000
Training and Education:
    Company Core Project Team Vendor Training   34,000
    General Accounting (system maintenance)   18,000
    Budget Administration and Power Users   12,000
    Reporting and Query   12,000
    Other Users   72,000
    Total Training and Education   148,000

Total One-Time Project Costs   2,249,000
Plus Contingency   250,000
Total One-Time Project Cost Including Contingency   2,499,000

Annual Maintenance:
    Package System Maintenance   67,000
    System Administration - 1 Client FTE   55,000
    System Support - 1 IT FTE   55,000
    Total Annual Maintenance (Note 2)   177,000

Savings
    Employee Efficiency Improvements:
        Current Costs:

Budget Coordinators	215,000	(a)
Projects To Enhance Existing Systems	150,000	(a)
Accounting Departments "Gorilla Work"	150,000	(a)
Accountant General Efficiency	150,000	(a)
G.O. Managers (time spent "chasing numbers")	280,000	
Regional Managers (time spent "chasing numbers")	294,000	
Corporate Accounting and IT (time spent on closings)	25,000	
Total Current Costs	1,264,000	
Projected Percent Saved (half of current costs)	x .50	
Projected Amount Saved	632,000	

Breakdown Of Employee Efficiency Savings:

Time Allocated To Other Activities (half of savings)	316,000
Hard FTE Savings (half of savings) (a)	316,000
Total	632,000
Additive of 54% Applied To Hard FTE Savings (Note 3)	170,000
Total Savings	802,000

Other Savings:

Printing Eliminated	4,000
Contract **Programmer** (Budget Entry System **Maint.**)	10,000
Total Other Savings	14,000

Total Savings	816,000

One-Tie Savings:

Year 2000 Cost Avoidance For Current Systems	270,000
Year 2000 Cost Avoidance For MAS90	1,000
Cost Avoidance For Not Completing Pending MISR's	100,000
Total	371,000

Note 1: *An* additional $292,000 (additive on company labor) was included for financial analysis but is not actually charged to the project.

Note 2: *An* additional $60,000 (additive on **company** labor) was included for financial analysis but is not actually charged to the project.

Note 3: An additional $170,000 (additive on portion of savings identified as allocated to other activities) was included for financial analysis.

Note 4: Additional infrastructure hardware is **not** included in this project budget. It is assumed that virtually all core business leaders will have ready access to necessary **baseline** desktop equipment. Other technology assumptions are presented in the Cost Benefit Detail Analysis in the appendix.

(a) Five Hard FTE reductions are expected from these categories.
1 -Accounting Projects person; 1- Programmer; 1- Budget Coordinator; 2- Accountants

Intangible Benefits

The following intangible benefits are presented for consideration in justifying this project. These items have not been quantified in terms of economic benefit.

Employee Satisfaction:

- Eliminate repetitive manual functions of rekeying data and the cutting up and distribution of reports.
- Reduced costs for training new employees for the accounting system and Chart of Accounts.
- Improved morale and self esteem derived from working with a state of the art system.
- Employees can utilize the skills for which they were hired.
- Employees burn out will be reduced.
- Increase employee satisfaction and development as prescribed by the "employer of choice" and New Deal concepts.

Information:

- Data will be available on a timely basis.
- Data will be consistently maintained.
- Immediate access to data will be available through drill around.
- Better quality reports and analyses will be available.
- Costs of chasing financial numbers will be significantly reduced.
- Uniform reports will project an integrated corporate image.

Processes:

- Process Improvements for allocations, intercompany billing and data access.
- Reduced month-end bottlenecks by supporting exception processing daily.

System:

- Reduced risk of catastrophic system failure.
- Reduced pressure and increased efficiency of working with a reliable system.
- Reduced and consolidated system/table maintenance.
- Indirect mainframe cost avoidance.

Management Tools:

- Provide reporting that addresses business needs.
- Planning and scheduling can become more realistic and predictable activities.
- Increased accountability of employees for time and evaluation of employee effort and results.
- Increased **understanding** of business **unit/departmental** interdependencies.
- Increased and improved communication and cooperation.

Future:

- Technology and time efficiencies allow for more business planning **and analysis.**
- Enhanced employee **skills** provide an opportunity for adding value to their department.
- Accounting can become a value added service unit.
- Perception of the Company being on the cutting edge as well as being the lowest cost provider.
- Places the Company in a stronger position with regards to mergers, acquisitions and other **structural/organizational** changes.

Business Risk Assessment

Description	*Business Impact*	*Risk*	*Contingency*
Current systems will not run beyond the 12-31-88 financial close because they are not year 2000 enabled.	Incur significant cost for programming changes or cease operation of these systems.	H	Complete programming changes to accommodate year 2000 requirements. Cost are approximately 5270.000.
System fails for reasons that can't be readily identified and corrected. Financial closing can't be completed. (Only 5 of 28 closings have completed uninterrupted.)	No financial results available to management No data available for Internal or external financial/regulatory reporting.	M	Increase support talent in IT and accounting areas. Devise an alternative process.
Loss of existing staff and inability to attract and retain new staff in the IT and Acmunting organizations due to the lack of a quality work environment. Also, availability of appropriately skilled personnel is limited, resulting in higher cost.	Loss of qualified employees will reduce the ability to maintain the systems. At some point, this will Impact the e b i l i i to complete financial dosing and satisfy various internal and external reporting requirements.	H	Hire available personnel and provide training to upgrade their skills In required levels.
The Accounting Departments role in supplying data to non-accounting segments of the company will continue to diminish.	Accounting will not be able to provide required services to other departments. Various personnel will continue to develop "off-line" applications to work around system deficiencies. These applications are not likely to be in compliance with IT standards related to items such as security, internal controls and documentation, thus Increasing the potential for data Integrity problems.	M	

Description	Business Impact	Risk	Confingency
Future of the Unlsys A-16 mainframe is uncertain due to questions about the long term viability of the currenthardware vendor in the market place. Duration of current vendw support level is unknown.	At some point, the hardware platform and operating system may no longer be usable. Systems can not be easily migrated to another platform. Will not be able to complete ɳ dosing. Nᵢ current pport agreement ɋ in 2002.	M	Work with vendor to develop a viable support commitment.
Business decisions made with unreliable data due to inconsistencies in current production systems and "off-line" work around applications.	Bad decisions may result in financial loss.	H	Develop a data warehouse populated from appropriate feeder systems.
Data not available in a timely manner.	Management's ability to quickly respond to changing business conditions and to identify and address problems will be limited.	M	Capture feeder system data daily independent of financial systems.
Current systems will need costly major modifications to support future business changes such as deregulation and adding new corporate entities.	Additional "off-line" applications will need to be developedto compensate for system deficiencies. These applications are not likely to be in compliance with IT standards related to items such as security, internal controls and documentation, thus Increasing the potential for data Integrity problems.	M	Implement necessary changes in existing systems. Costs are very high (millions).
System fails for reasons that can't be readily identified and corrected. Financial closing can't be completed.	No financial results available to management. No data available for Internal or external financial/regulatory reporting.	M	Increase support talent in IT and accounting areas. Devise an alternative process.
Non-efficient utilization of resources due to duplication of effort. Personnel in different areas could be creating the same "off-line" application independently, rather than coordinating efforts.	Increased costs.	L	Implement process improvements.

APPENDICES

- **Cost Benefit Analysis Details**

- **Net Present Value Analysis**

- **Replacement Boundaries**

- **Data Flow Diagrams**

- **Chart of Accounts Concepts**

Cost Benefit Analysis Details

Cost Benefit Analysis - Detail Assumptions

<u>*Software Costs:*</u>

General Ledger	$ 160,000

General accounting, budgeting, extensive reporting, hierarchy maintenance, recurring journal entries, reversing journal entries and allocations functions.

Asset Management	75,000

Tax depreciation, book analysis and depreciation functions.

Activity Management	160,000

An **activity** accounting system that provides the basis for activity-based costing (ABC) and also provides advanced project accounting. Supports distribution of all types of costs to GL accounts or activities based on company requirements. Relationships between departments or levels can be changed to accommodate organization changes.

<u>*Development and Implementation*</u>

<u>*Company Resources*</u>	485,000

A core team of 4 employees will be required for the duration of the project. Members will range from senior staff level to manager.

<u>*Consultant Resources*</u>

2-3 consultants can be utilized throughout the project.
The costs below indicate only using two consultants.

Detail Design all Processes and Programs ($150/hour)	150,000
Package Software Implementation ($150/hour)	
General Ledger	120,000
Activity Management	160,000
Asset Management	70,000

<u>*Programming Services(in-house or external)*</u>

Existing Data Conversion (programming resource $95/hour)	
Map Chart-of-Accounts Conversion Tables ($150/hour)	48,000
GA - to - General Ledger Master File	22,800
GA - to - General Ledger Transaction History	22,800
AIDS Budget - to - General Ledger	22,800
ACUFILE - to - Asset Management Master File	22,800
MAS90 - to - General Ledger Master File	7,600
MAS90 - to - General Ledger Transaction History	7,600

Feeder **System** changes to accommodate Validation and Chart of Accounts
(programing resource $80/hour)

Depreciation Study	3,200
Construction Maintenance	3,200
Lawson Accounts Payable Master File	6,400
Lawson Purchasing Master File	6,400
Labor Distribution (Maintenance Time)	3,200
Labor Distribution (Other)	20,000
MNIS Work Tracking	12,800
PBS Personal Benefits System	3,200
Payroll	12,800
Revenue Accounting/Special Billing/Supply (GasPro)	24,000
Service Pipe	16,000

Hardware Costs:
Unix Server

335,000

This project will require a new server for retaining the data base and
financial applications. The new server would be added to the existing
configuration as an application server for all packaged software with the
current server becoming a database server for all packaged software.

Training and Education ($150/hour)

Training For Core Team In Vendor Specific Features/Functions (Capital)	34,000
General Accounting, system maintenance and **journal** entry	18,000
Budget Administrators and other power users	12,000
Reporting and Query, for management level and above	12,000
All other users, to address accounting procedure changes	72,000

Annual Maintenance Fees

General *Ledger*	27,000
Asset Management	13,000
Activity Management	27,000

Employee Efficiency Improvements:

Budget Coordinators

215,000

Based on an interview with the budget coordinators, we
determined that approximately 4 FTE's are devoted to this activity
and that most of their work is manual. Current cost is 4 * $53,700
(average wage for level 4 and 5 employees) = $215,000.

Accounting Department "Gorilla Work"   150,000
>   The project team surveyed managers in the accounting
>   departments and asked their staff's to identify ongoing activities
>   that are manual or require *extensive* rekeying of data into "off-
>   line applications". Items identified totaled approximately 6,500
>   hours aer year. Current cost is 6,500 hours * $23 aer hour
>   (average hourly rate for level 1 to 5 employees) = $150,000.

Accountants General Efficiency   150,000
>   *We* estimate *that* the average accountant wastes one-half hour
>   per day as a result of working with systems that are "difficult to
>   use". Current cost is calculated as follows: 50 people
>   (accountants/supervisors/managers) * one-half hour per day *
>   20 work days per month * 12 months * $25 per hour =
> $150,000.

Projects To Enhance Existing Systems   150,000
>   Based on records kept by Information Systems, we spend
>   approximately 6,000 hours per year on various projects
>   involving enhancements to or around the existing systems. Cost
>   is 6,000 hours at $25 per hour = $150,000.

Regional Managers   294,000
>   Based on an interview with a sample of regional managers from
>   NCAT, Operations and Maintenance, it was a p e d that this
>   group spends about 10-15% of their time "chasing numbers".
>   We used the lower number for our current cost calculation: 42
>   people (regional 6 and 7 level managers) * 10% of their time *
> $70,000 (average wage for levels 6 and 7) = $294,000.

Headquarters Managers   280,000
>   Due the differences between staff and line responsibilities, we
>   assumed that G.O. managers spend half of *the* time "chasing
>   numbers" than their regional counterparts, or 5% of their time.
>   Current cost is 80 people (G.O. level 6 and 7 managers) * 5% of
>   their time * $70,000 (average wage for levels 6 and 7) =
> $280,000.

System Support   25,000
>   Based on discussion with appropriate employees in Corporate
>   Accounting, we determined that about 2 person days per month
>   are spent handling closing problems. This effort would be
>   eliminated. Calculation of savings are as follows: 2 days per
>   month * 12 months * 8 hours per day * $25 per hour

(approximate equivalent hourly rate) = $5,000 rounded. In
addition, Information Systems has logged approximately 800 in
resolving closing problems during 1996. This cost of this effort
is 800 hours * $25 per how or $20,000. Total cost for both parts
is $25,000.

Employee efficiency savings total $1,264,000. We anticipate being able to save half of
that amount or $632,000. We anticipate that half of the amount($316,000) will be
realized by reallocating resources to other activities. The other $316,000 will be attained
through hard FTE savings. Application of the 54% additive to the hard FTE savings
results in a total savings of $802,000. Additionally, $14,000 in other savings have been
identified, bringing the total to $816,000.

Hard FTE reductions will come primarily from the accounting organization. Budget
accounting and budget coordinator FTE's should be reduced as well as
governance/compliance FTE's. Project work on and around the accounting systems,
which has been an ongoing activity in recent years, will be eliminated, and is partially
offset by ongoing software maintenance and direct FTE support as identified in the
ongoing costs.

Estimates to Add Functionality to Our Existing Mainframe Systems

Historical Costs		Hours	Totals	Potential Enhancements	Hours
96 Maint	DP	58		Handle Re-orgs	3,000
	FA	50			
	GA	851		On-line Entry of:	3,000
	GB	5		- JE's	
	IA	32		- Work Orders	
	PL	619		- Functions	
	RU	233			
	TA	0		Change for COA	12.000
	AD	418			
	BG	216		Daily Access to Data	3,000
	BP	712			
	MH	0	3.194	Better Reporting Capability	3.000
FMS			2.720		
Restructuring			1.244	Better Integration (GA, AD, PL)	3,000
				Push DUD Process Out	5,000
95 Maint	FA	8			
	GA	1,228		Multi-Company Capability	N/A
	GB	1			
	IA	153		Automatic Consolidations	N/A
	RU	212			
	TA	0		Rewrite Inter-Company Billing	5.000
	AD	695			
	BG	141		Hours	37,000
	BP	278			
	DP	0		Programming cost per hour	$100
	MH	3			
	PL	1,546	4,265		
Restructuring			5,792		$3,700,000
94 Maint	FA	2			
	GA	678			
	GB	56			
	IA	131			
	RU	805			
	TA	7		NOTE:	
	BG	401		These estimates were prepared by	
	DP	44		comparing the task's relative complexity	
	MH	0		to other, recent accounting system	
	PL	1,019	3,143	changes (AIRS, FMS, etc.).	
AD System			2,560		
Div Combo			255		
93 Maint	GA	891			
	GB	63			
	IA	202			
	RU	378			
	BG	273			
	DP	114			
	MH	9			
	PL	1,453	3,383		
AIRS			229		
Dam Warehouse			243		
Div Combo			313		

Financial Systems Replacement Project
Business Case

Technology Assumptions

1. Network enhancements

    The cost to connect business leaders to the corporate network is assumed to be in place and will not require additional investments charged back to this individual project. Since the cost is driven by the number of people by location requiring access to the new accounting system, the project must provide a list of these users. Information Technology will review this list to determine which network links need enhancement, if any, **prior to project completion in December 1998. Since virtually** all of the 380 users of the **financial** systems are the business leaders of the company, **we assume** that necessary base business technologies will be generally available to **them** on an ongoing basis.

2. PC Upgrades

    The cost to upgrade the PC for each of the users who are expected to need access to the new systems is a company infrastructure requirement that is caused by several simultaneous initiatives and should not be charged back to this individual project.

3. Informix Data Base

    The cost in software license fees to install and attach to the corporate data base is a company infrastructure requirement that is caused by several simultaneous initiatives and should not be charged back to this individual project.

4. Server software tools

    The new application and software server will require support software for performance, monitoring, tuning, scheduling and administration which is not included in the vendor application software. This software is required to support the Procurement and MNIS systems and currently is being acquired; therefore no additional licensing costs should be incurred in the purchase of a second server

5. Off-line Processing

    The time and effort required to replace or significantly enhance user developed spreadsheets and MS Access databases that are not replaced as a result of this project is not in this project's scope.

6. Disaster Recovery

    This is assumed to be included in the corporate disaster recovery plans and capabilities, and therefore no additional costs are included in this project.

Net *Present Value Analysis(see attached)*

Net present value calculations are attached for several scenarios. The base case uses an investment assumption of **$2,500,000.** These numbers will be further refined in the next stage, but lead to a positive NPV of over **$1.4** million.

The second scenario assumes delay of this project util the year **2002,** with having to spend money to make our current systems year **2000** compliant. This NPV is nearly **$500,000 lower than** the base case.

The third scenario considers the NPV calculated based on the hard costs and hard savings only. Hard costs are for software, hardware and consulting/outside programming. Savings are for year **2000** avoidance and direct **FTE** reduction, This demonstrates a break-even NPV.

The fourth scenario represents the project costs ofupgrading our current systems. This is projected to be a **$3,700,000** investment, and is not a practical scenario. The consults don't believe we can accomplish it with this type of investment, and it is doubtful whether full benefits can be achieved, nor in the time frame indicated in the base case. We would more than likely just live with the existing functionality of our current systems, other than making them year **2000 compliant.**

FINANCIAL INFORMATION SYSTEM

Financial Factors	
Cost of Capital =	10.00%
Inflation Rate =	3.00%
Tax Rate =	39.67%
Annual Savings =	987,280
Annual Maintenance Cost =	(236,400)
One-Time Savings =	371,000

[632,000*1.54 +14,000]

[-177,000 + 0.54*(-55,000-55,000)]

Initial Investment After Tax						
	Initial Outlay	54% Additive	10% Contingency	Total	Factor	After-Tax PV
Software	(445,000)		(44,500)	(489,500)	0.700552	(342,920)
Hardware	(335,000)		(33,500)	(368,500)	0.708058	(260,919)
Dev. & Implement.	(1,321,000)	(291,600)	(161,260)	(1,773,860)		(1,037,792)
Training & Educ.	(148,000)		(14,800)	(162,800)		(95,246)
TOTAL	(2,249,000)	(291,600)	(254,060)	(2,794,660)		(1,736,877)

Above	(1,321,000)
Break-even	(3,627,676)
Required reduction	($2,306,676)

	0	1	2	3	4	5	6	7	8	9	10	11
Present Value Factor	1.0000	0.9091	O . W	0.7513	0.6830	0.6209	0.5645	0.5132	0.4665	0.4241	0.3855	0.3505
Inflation Factor		1.0300	1.0609	1.0927	1.1255	1.1593	1.1941	1.2299	1.2668	1.3048	1.3439	1.3842

Inflows:

	0	1	2	3	4	5	6	7	8	9	10	11
One-Ti Savings	185,500	185,500										
Savings			1,047,405	1,078,828	1,111,192	1,144,528	1,178,864	1,214,230	1,250,657	1,288,176	1,326,822	1,366,626

Outflows:

	0	1	2	3	4	5	6	7	8	9	10	11
Maintenance			(250,797)	(258,321)	(266,070)	(274,052)	(282,274)	(290,742)	(299,464)	(308,448)	(317,702)	(327,233)

	0	1	2	3	4	5	6	7	8	9	10	11
Difference	185,500	185,500	796,609	820,507	845,122	870,476	896,590	923,488	951,192	979,728	1,009,120	1,039,394
After-Tax Difference	111,918	111,918	480,618	495,036	509,887	525,184	540,940	557,168	573,883	591,099	608,832	627,097
Present Value	111,918	101,743	397,205	371,928	348,260	326,098	305,346	285,915	267,721	250,684	234,731	219,794

Total Initial Investment After Tax	(1,736,877)
Present Value of Savings	3,221,343
NET PRESENT VALUE	1,484,466

FINANCIAL INFORMATION SYSTEM (B)

Financial Factors	
Cost of Capital =	10.00%
Inflation Rate =	3.00%
Tax Rate =	39.67%
Annual Savings =	987,280	[632,900*1.54 +14,000]
Annual Maintenance Cost =	(236,400)	[-177,000 + 0.54*(-55,000-55,000)]

Initial Investment After Tax

	Initial Outlay	54% Additive	10% Contingency	Total	Factor	Inflation	Discount	After-Tax PV
Software	(445,000)		(44,500)	(489,500)	0.700552	1.092727	0.751315	(281,531)
Hardware	(335,000)		(33,500)	(368,500)	0.708058	1.092727	0.751315	(214,210)
Dev. & Implement.	(1,321,000)	(291,600)	(161,260)	(1,773,860)	0.585047	1.092727	0.751315	(852,008)
Training & Educ.	(148,000)		(14,800)	(162,800)	0.585047	1.092727	0.751315	(78,195)
TOTAL	(2,249,000)	(291,600)	(254,060)	(2,794,660)				(1,425,945)

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Present Value Factor	1	0.909091	0.8264463	0.751315	0.6830135	0.620921	0.564474	0.513158	0.466507	0.424098	0.385543	0.350494	0.318631	0.289664	0.263331
Inflation Factor		1.03	1.0609	1.092727	1.1255088	1.159274	1.194052	1.229874	1.26677	1.304773	1.343916	1.384234	1.425761	1.468534	1.51259
Inflows:															
Savings						1,144,528	1,178,864	1,214,230	1,250,657	1,288,176	1,326,822	1,366,626	1,407,625	1,449,854	1,493,350
Outflows:															
Maintenance						(274,052)	(282,274)	(290,742)	(299,464)	(308,448)	(317,702)	(327,233)	(337,050)	(347,161)	(357,576)
Difference						870,476	896,590	923,488	951,192	979,728	1,009,120	1,039,394	1,070,575	1,102,693	1,135,773
After-Tax Difference						525,184	540,940	557,168	573,883	591,099	608,832	627,097	645,910	665,288	685,246
Present Value						326,098	305,346	285,915	267,721	250,684	234,731	219,794	205,807	192,710	180,447

Total Initial Investment After Tax	(1,425,945)
Present Value of Savings	2,469,253
NET PRESENT VALUE	**1,043,308**

FINANCIAL INFORMATION SYSTEM (Hard Costs/Savings)

Financial Factors		
Cost of Capital =	10.00%	
Inflation Rate =	3.00%	
Tax Rate =	39.67%	
Annual Savings =	482,160	[304,000*1.54 + 14,000]
Annual Maintenance Cost =	(236,400)	[-177,000 + 0.54*(-55,000-55,000)]
One-Time Savings =	271,000	

Initial Investment After Tax						
	Initial Outlay	54% Additive	10% Contingency	Total	Factor	After-Tax PV
Software	(445,000)		(44,500)	(489,500)	0.700552	(342,920)
Hardware	(335,000)		(33,500)	(368,500)	0.708058	(260,919)
Dev. & Implement.	(781,000)		(78,100)	(859,100)		(502,614)
Training & Educ.	(76,000)		(7,600)	(83,600)		(48,910)
TOTAL	(1,637,000)	0	(163,700)	(1,800,700)		(1,155,364)

Above	(781,000)
Break-even	(757,861)
Required reduction	$23,139

	0	1	2	3	4	5	6	7	8	9	10	11
Present Value Factor	1.0000	0.9091	0.8264	0.7513	0.6830	0.6209	0.5645	0.5132	0.4665	0.4241	0.3855	0.3505
Inflation Factor		1.0300	1.W	1.0927	1.1255	1.1593	1.1941	1.2299	1.2668	1.3048	1.3439	1.3842
Inflows:												
One-Time Savings	135,500	135.500										
Savings			511,524	526.869	542.675	558956	575.724	592996	610.786	629,109	647,983	667.422
Outflows:												
Maintenance			(250,797)	(258,321)	(266,070)	(274,052)	(282,274)	(290,742)	(299,464)	(308,448)	(317,702)	(327,233)
Difference	135,500	135,500	260,727	268,549	276,605	284,903	293,450	302,254	311,321	320,661	330,281	340,189
After-Tax Difference	81,751	81,751	157,304	162,023	166,884	171,891	177,047	182,359	187,830	193,464	199,268	205,246
Present Value	81,751	74,319	130,004	121,731	113,984	106,731	99,939	93,579	87,624	82,048	76,827	71,938

Total Initial Investment After Tax	(1,155,364)
Present Value of Savings	1,140,473
NET PRESENT VALUE	(14,891)

FINANCIAL INFORMATION SYSTEM ($3.7 MM)

Financial Factors	
Cost of Capital =	10.00%
Inflation Rate =	3.00%
Tax Rate =	39.67%
Annual Savings =	987,280
Annual Maintenance Cost =	(236,400)
One-Time Savings =	371,000
Total Outlay	(3,700,000)

{632,000*1.54 +14,000}

{-177,000 + 0.54*(-55,000-55,000)}

Above	(3,700,000)
Break-even	(5,593,523)
Required reduction	($1,893,523)

	0	1	2	3	4	5	6	7	8	9	10	11
Present Value Factor	1.0000	0.9091	0.8264	0.7513	0.6830	0.6209	0.5645	0.5132	0.4665	0.4241	0.3855	0.3505
Inflation Factor		1.0300	1.0609	1.0927	1.1255	1.1593	1.1941	1.2299	1.2668	1.3048	1.3439	1.3842
Inflows:												
One-Time Savings	185.500	185,500										
Savings			1,047,405	1,078,828	1,111,192	1,144,528	1,178,864	1,214,230	1,250,657	1,288,176	1,326,822	1,366,626
Outflows:												
System Cost	(1,850,000)	(1,850,000)										
Maintenance			(250,797)	(258,321)	(266,070)	(274,052)	(282,274)	(290,742)	(299,464)	(308,448)	(317,702)	(327,233)
Difference	(1,664,500)	(1,664,500)	796,609	820,507	5075,122	870,476	896,590	923,488	951.192	979,728	1,009,120	1,039,394
After-Tax Difference	(1,004,243)	(1,004,243)	480,618	495,036	509,887	525,184	540,940	557.168	573,883	591,099	608,832	627,097
Present Value	(1,004,243)	(912,948)	397,205	371.928	348,260	326,098	305.346	285,915	267,721	250,684	234,731	219,794

NET PRESENT VALUE	1,090,491

Financial Systems Replacement Project
Business Case

Replacement Boundaries

LEGEND
– – –▶ Auto Journal Entr
◀ – – – – Data *flow* back

5

Financial Systems Replacement Project
Business Case

System Descriptions

Accounting

AADAS	Arthur Andersen Depreciation System	
AD	Accounting Data	
AIRS	Acctg Info Retrieval System	5-yr history, detail, function and BC summaries
BG	Budget System	
DP	Depreciation Studies	
FA	Financial Accounting Studies	
GA	General Accounting	general ledger system
GB	General Books	
IA	Inter-company Billing System	
IFPS	Forecasting financial models	
Lawson	Procurement Module	includes Accounts Payable, Inventory Control, Purchase Orders, and Requisitions
LD	Labor Distribution	system to compute cost per job
MAS90	Subsidiary Accounting System	
PL	Plant System	Construction work in process
PLCMSE	Plant system	Fixed assets
RU	Reconciliation/Unclaimed	Bank reconciliations
TA	Technical Accounting	houses the chart of accounts and account balances
TMS	Treasury Management	

Other

A/R	Great Plains Accounts Receivable	Miscellaneous Billing
CAD	Computer Aided Dispatching	
CI	Customer Information	
CIS	Customer Information System	database for CS
CM	Construction Maintenance	
CS	Customer Service System	
Itron	hand held reading devices	
MA	Meter Accuracy	
MH	man hours	
MR	Meter Reading System	
OC	On-line Communication System	phone bills
PBS	Personnel Benefits System	
PP	Postage System	
PR	Payroll System	
RA	Revenue Accounting System	billing system for sales customers
SB	Special Billing	billing system for transportation customers
SP	Service Pipe System	tracks costs by service size by area
TR/FMS	Transportation System	tracks cost by vehicle

System/ Process	Descriptions and Functions Performed	In/ Out?	Comments
AADAS	Arthur Andersen Depreciation Analysis Study. Does annual analysis and accumulation of additions and retirements.	OUT *	• Plant sub-accounts will change but G/L accounts will not • 40 hrs work
ACUFILE	Taxes	IN	• Determine what will be automated and what will remain manual
AD	Accounting Database (LINC - 30 programs) • on-line inquiry for work orders and capital projects; also, used to verify functions for their their existence • on-line maintenance for accounting hierarchy and budgets • batch posting of monthly numbers from GA for AIRS • Transportation reports We have W replace this!!	IN	TOTAL SYSTEM REPLACEMENT
AIRS	Accounting Information Retrieval System (INSYTE - 7 programs) Menu system sitting on top of a data repository with about 45 canned reports and ad hoc capabilities for power users. Includes transportation (clearing?) report(s?). We have to replace this!!	IN	TOTAL SYSTEM REPLACEMENT
BG	Budgeting System (COBOL - 2 programs) Produces two reports: current month and YTD Departmental Statements. It's only two reports, but is a report they really like - could take a paradigm ship	IN	TOTAL SYSTEM REPLACEMENT
Budget Prep NI-Gas	(UNIX system, SQL Server) Accepts actuals from mainframe systems to populate tables for yearly budgeting process. Exports approved budget to mainframe.	IN	TOTAL SYSTEM REPLACEMENT

System/ Process	Descriptions and Functions]	In/ Out?	Comments
Budget Prep NICOR	Manual system.	IN	• **Currently Lotus based.** • Need to be incorporated with NI-Gas budget process.
CAD	**Computer** Aided Dispatching Work scheduling system on **Tandem** computer **from** a company called Alliance. Linked to the UNISYS to accept work tickets on-line and forward via radio to service reps. Forwards status updates back to UNISYS for **on-line** updating of completed tickets.	OUT *	• No change. • The same work codes will be used. Should be able handle mapping of work codes to new chart of account without change to **CIS.**
CI	**Customer** Information (COBOL - 14 programs) **Collects** info on **completed** tickets from CS, reports on the Production Report, and forwards **summarized** function level data to **LD.**	OUT *	• No impact, because work wde **conversions** take place in LD. • Update procedures.
CM	**Construction** Maintenance (COBOL - 52 programs) On-line collection and **tracking** of info on new customers and services being replaced. Batch process to post info daily.	OUT *	• Work tickets generate function numbers. • Mapping will change. • Hand held project • Time **reporting** for Carthage. Why? • **40 hrs work**

CS	Customer **Service** (COBOL - 97 programs, 230k **lines** of code)
	   On-line process to **accept** m y and varied pieces of info on customers.
	   Generates a ton of **reporting** daily, monthly, quarterly and yearly.
		OUT
		*
			No change; mapping of work codes to **new** chart of account will **take** place in LD.

Dept Repts Acctg	Many departments use AIRS to produce various reports or as a vehicle to download or **lookup** numbers for their own Lotus **spreadsheets.** • prepare Blue Book	IN	**TOTAL SYSTEM REPLACEMENT**

System/ Process	**Descriptions** and Functions Performed	In/ Out?	Comments
Dept Repts Non Acctg	Many departments use AIRS to produce various reports or as a vehicle to download or lookup numbers for their own Lotus spreadsheets.	IN	**TOTAL SYSTEM REPLACEMENT**
DP	Depreciation Study (1 COBOL program) Interface to AADAS - Arthur Andersen Depreciation Analysis Study - from the Plant System,	IN	Will be replaced
Fore casting	Uses IFPS for modeling	OUT	IFPS moving to network version from IBM computer. Will continue as modeling tool.

GA	General Accounting (COBOL - 35 programs, 50 Audit Reporter programs)
	• post transactions and "close*" the books; distribute reports
	   prepare AA work papers
	• process duds
	   prepare manual JE's (burden overhead allocation, recurring)
	• transportation clearing (from ADDB)
	• consolidations (manual)
		IN	TOTAL **SYSTEM** REPLACEMENT

GB	General Books (COBOL - 2 programs, 310 and 710) input misc cash *Included so it doesn't get missed*	IN	**TOTAL SYSTEM REPLACEMENT**

System/ Process	Descriptions and Functions Performed	In/ Out?	Comments
IA	Inter-company Billing (COBOL - 7 programs) *It's BIG! it's complex!! And it's broke!!*	**IN**	**TOTAL SYSTEM REPLACEMENT**
ITRON	Remote data entry interface to MR **system** for gathering meter reading. Routes are fed from the **mainframe** and updated to the **mainframe** daily (**hand-held** units are plugged into base units in regional offices for this data transfer).	OUT *	• If validation exists today, then changes will be **minor.** If not, validation will be added. • If similar to CAD or CS, then mapping will need to be done. • If meter reader enters **function** number or checks **function** box, then changes will be made. • Convert pay codes to the new COA.
Lawson	Procurement modules (A/P, I/C & P/O)	OUT *	• Chart of Accounts will change. • Should be some conversion costs for open items. • Using the activity code for sub field needs to be addressed. • **Probably** quite a few changes. Follow up to determine scope of changes necessary. • 160 hrs work.

System/ Process	Descriptions and Functions Performed	In/ Out?	Comments
LD **A TIME**	Labor Distribution (COBOL, 2 programs) **Should be in HR!! Where is Man Hours per Work Unit?**	OUT	• Validation will need to be **changed.** • Distributes labor (payroll screen) but has .nothing to do with the LD system. • Uses function numbers and work orders. • Discussions need to take place in order to determine how the **FIAT** and **FIS** projects will move forward together (**e.g.** create a throwaway COA for the old system, develop FIAT **system** with new COA, convert old function numbers behind the scenes). 40 hrs work. **Assumption: Wipe out old Chart of Accounts Table and reload new one on the mainframe.**